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A CONCEPTUAL FRAMEWORK FOR THE DERIVATION OF GUIDANCE OBJECTIVES AND OUTCOME CRITERIA--PRELIMINARY STATEMENT.

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RESEARCH IN COUNSELING AND PSYCHOTHERAPY IS EXPLORED. BECAUSE THERE ARE SERIOUS LIMITATIONS TO THE ARTIFICIAL DISTINCTION BETWEEN PROCESS AND OUTCOME RESEARCH, THE AUTHOR FEELS THAT PROCESS AND OUTCOME RESEARCH SHOULD BE CARRIED ON CONCURRENTLY. PROBLEMS IN OUTCOME RESEARCH INCLUDE (1) SPECIFICATION OF INDEPENDENT VARIABLES, (2) CONTROL OF VARIABLES, (3) SPECIFICATION OF APPROPRIATE CRITERIA, (4) DEVELOPMENT OF AN ADEQUATE RESEARCH PARADIGM, AND (5) SOLUTION OF METHODOLOGICAL PROBLEMS OF RESEARCH DESIGN. THE NATIONAL STUDY OF GUIDANCE IS ATTEMPTING TO DEVELOP GUIDANCE OBJECTIVES AND APPROPRIATE BEHAVIORAL CRITERIA FOR EVALUATION. EIGHT PROPOSITIONS WHICH ALLOW FOR HUMAN DEVELOPMENT AND PROVIDE A FRAME OF REFERENCE FOR RESEARCH ON GUIDANCE OUTCOMES ARE PRESENTED. THIS CONCEPTUAL FRAMEWORK CONSIDERS INDIVIDUAL DEVELOPMENT AND INTERACTION AMONG DEVELOPMENTAL AND ENVIRONMENTAL VARIABLES. A HIERARCHY OF THREE GUIDANCE OBJECTIVE LEVELS IS PROPOSED. THIS PAPER WAS PREPARED FOR PRESENTATION AT THE INVITATIONAL CONFERENCE ON RESEARCH PROBLEMS IN COUNSELING (CENTRAL MIDWESTERN REGIONAL EDUCATIONAL LABORATORY, ST. ANN, JANUARY 10-12, 1967). (SK)

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A CONCEPTUAL FRAMEWORK FOR THE DERIVATION OF GUIDANCE OBJECTIVES AND OUTCOME CRITERIA: PRELIMINARY STATEMENT[1, 2]

Frank E. Wellman

INTRODUCTION

The primary purpose of this paper is to present one approach to a conceptual framework for the development of secondary school guidance objectives and the derivation of behavioral criteria relevant to outcome research. An overview of the major problems in the research of counseling outcomes and a brief history of the National Study of Guidance are presented as introductory material to the larger problems of which the conceptual framework presented here is only one small part.

A review of outcome research in guidance, counseling and psychotherapy is not included in this paper, but it should be noted that excellent reviews have appeared in recent issues of the Annual Review of Psychology, the reports of the APA conferences on research in psychotherapy, the Review of Educational Research, the Journal of Counseling Psychology, and as a part of methodological contributions in the Psychological Bulletin (Brayfield, 1963; Carkhuff, 1966; Colby, 1964; Cross, 1964; Dittmann, 1966; Farnsworth, 1966; Kiesler, 1966; Matarazzo, 1965; Myers, 1966; Patterson, 1966; Seeman, 1961; Strupp, 1962; Strupp and Luborsky, 1962; Wirt and Wirt, 1963; Zax and Klein, 1960; Review of Educational Research, 1963 and 1966).

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The almost exclusive emphasis in reported studies on counseling and psychotherapy as compared with the broader process of guidance suggests that (1) research effort has been concentrated in the more restricted process area of counseling and psychotherapy, and (2) this research represents the existing body of knowledge which can serve as a point of departure for the development of research more pertinent to the total guidance area. The first part of this discussion is an attempt to capitalize upon the research on counseling and psychotherapy as an aid in making the transition to the broader study of guidance discussed later.

An examination of research in counseling and psychotherapy seems to support the following general observations:

1. The vast majority of the studies reported were conducted with readily available subjects in college counseling centers or hospital settings, and relatively few were found dealing with the secondary school age group or in this educational setting.
2. The space of free movement of clients has been restricted in many studies by the settings in which they were conducted.
3. The emphasis has been on the reduction of negative behavior where disabling deviations are evident, rather than upon the development of positive behavior within the "normal personality."
4. Semantic variations among, and sometimes within, the various theoretical orientations tend to create confusion and to increase the possibility of erroneous interpretations
5. Most studies have been somewhat fragmentary in nature dealing with extremely limited aspects of behavior and

restricted independent variables.

These observations are presented, not as a criticism of the work that has been done but as considerations in the interpretation and use of research results, as well as in the design of new research. Before discussing the major problems in outcome research the issue of the distinction between process and outcome research deserves special attention due to its relevance to the framework suggested later in this discussion.

PROCESS-OUTCOME DISTINCTION

The trend toward increased interest in process studies and perhaps some reluctance to undertake outcome studies has been noted frequently (Farnsworth, 1966; Meyers, 1966; Strupp, 1963; Volsky, 1965). The traditional distinction between process research and outcome research is the emphasis on how change occurs during treatment as opposed to what change resulted from treatment. Process research has, for the most part, been confined to observations made within the counseling relationship with emphasis upon client-counselor interactions. This type of research has relied primarily upon the verbal behavior of the client and counselor as a basis for inferences concerning the process of change during counseling or therapy. The dependent variables have thus, tended to be internal, global, and perceptual in nature.

Outcome research, on the other hand, has been typified by before-after measurement of the specified dependent variables, with little attention to changes occurring in process. Specific external criteria are more likely to be utilized, though not necessarily to the exclusion of verbal behavior of more global dimensions. While process research has been concerned with change in the interview

situation, outcome research has been focused upon change outside the interview.

In addition to methodological questions that can be raised regarding the limited range of behavior usually considered in process research, and the adequacy and reliability of the two point before-after measurements employed in outcome research, there are other major questions that suggest serious limitations to the somewhat artificial distinction between process and outcome. Kiesler (1966) takes the position that "to some extent process research is outcome research and outcome research is equivalent to process investigation." This merger of the two types of research is defensible when behavioral changes observed in the counseling situation are viewed as legitimate outcomes. Furthermore, repeated measures before-during-after counseling on a variety of dependent variables, both internal and external in nature, provide maximum opportunity to observe the process of change and the relationships that hypothetically exist between in-counseling behavior and external behavior. The developmental concept of continuity of movement in sequential progress, as suggested later in this discussion, can be investigated only when both internal and external behavioral changes, in the research area, are viewed as outcomes and are analyzed to determine the interaction of change in one situation with change in another. In this sense Farnsworth's (1966) recommendation that process and before-after studies be conducted concurrently seems to be pertinent to any serious effort to improve the design and interpretation of counseling outcome research. The position taken here is that the term process should be used to describe the experimental

(independent) variables applied to produce specified outcomes either in-counseling or out-of-counseling or both, and that issue is confused by trying to label some outcomes as process and others as end results.

PROBLEMS IN RESEARCHING COUNSELING OUTCOMES

Several excellent discussions of problems and issues in the research of the outcomes of counseling and psychotherapy have appeared in the literature during the last few years (Carkhuff, 1966; Colby, 1964; Farnsworth, 1966; Kiesler, 1966; Strupp, 1963; Strupp and Luborsky, 1962; Volsky, et.al., 1965; Zax and Klein, 1960). The recurring points in these discussions would suggest that counseling research is confronted with the same problems of designing and conducting rigorous experimental research as most other areas of the behavioral sciences. They are formidable but not insurmountable problems that must be solved before substantial improvement can be expected in the quality of outcome research.

First, the specification of the independent variables in a manner that will leave no doubt about what constituted counseling in the investigation is essential to any cause and effect conclusions and to enable replication of the study. Patterson (1966) noted that "a major defect in most studies of counseling or psychotherapy has been lack of control or specification of the independent or treatment variable, that is, the nature of the counseling or psychotherapy." The assumption that counseling is counseling regardless of where it is found, or by whom it is performed, is not sufficient for meaningful outcome research. Kiesler's (1966) point regarding misconceptions arising from the "uniformity assumption" is pertinent here. He contended that the assumption of therapist uniformity "ignores the growing body of evidence that psychotherapists are

quite heterogeneous along many dimensions (e.g., experience, attitudes, personality variables) and that these differences seem to influence patient outcome." Also, research reported recently by Truax and others (Truax and Carkhuff, 1965a, 1965b; Dickenson and Truax, 1966) accentuates the importance of giving major attention to therapist variability in outcome research. The obvious heterogeneity among counselors and the variability in the counseling situation dictate that every effort must be made to differentiate counselors and to describe in detail the counseling (process) variables. The effect of counseling on observed outcomes cannot be determined unless these most crucial independent variables are meticulously described.

Second, the uncontrolled variables that may influence outcomes have been a perpetual problem in counseling research. Variables which seem to be related to counseling outcomes and which may be described and controlled to some extent include client variables, life situation variables, and process situation variables. Kiesler (1966) asserted that the assumption of homogeneity among patients included in the samples traditionally available for research is untenable since heterogeneity can be demonstrated using practically any set of characteristics describing the background, personality or abilities of patients. He, therefore, concluded that studies conducted without taking account of patient variability cannot provide the evidence needed for meaningful conclusions concerning the effectiveness of therapy for different types of patients.

The ability to generalize results to specified populations requires careful attention and precise descriptions in the differentiation of clients treated. Volsky, et.al. (1965, p. 173)

observed that "the great heterogeneity of client complaints, problems, expectations, and length of treatment increases the difficulty of moving to a sufficiently molar level to provide generalizations which can be applied meaningfully across this array of heterogeneity."

Life situation variables are closely related to client variables in that they are viewed as a means of differentiating clients with respect to social, economic and cultural characteristics of the environment in which the client functions. Only superficial attention has been given to these variables in outcome research, but recent findings regarding their relation to educational outcomes suggests that they can no longer be ignored in counseling research (Strupp, 1963).

Process situation variables are inherent in the setting where counseling takes place. Perhaps the most apparent of these is the institutional setting. Other variables may include the actual physical aspects of the counselor's office. The extent to which outcomes or process is influenced by these situational variables may be difficult to assess, but the situation should be described so that erroneous generalizations can be avoided. Generalization of findings in a hospital setting to a school setting, for example, should be avoided until evidence is available that counseling outcomes are not related to the particular setting.

These three categories of client and situational variables can reasonably be assumed to be related to counseling outcomes. They are, in essence, independent variables that do not readily permit experimental manipulation, but they may be describable. If they can be described controls can be imposed through statistical and sampling procedures that will permit generalizations that are

not possible from a randomly selected sample.

Third, the specification of appropriate, adequate, and manageable criteria for outcome research is probably the most complicated issue in the assessment of counseling outcomes. The problem has received the attention of many writers and a few promising suggestions have emerged (Farnsworth, 1966; Kiesler, 1966; Krumboltz, 1966; Strupp, 1963; Zax and Klein, 1960).

The objectives and goals of counseling are the foundation upon which criterion variables must be built. Volsky, et. al. (1965, p. 14) observed that "More past failures to determine, unequivocally the effects of therapy can be traced to the lack of agreement on desired outcomes than to any other cause . . . unless the intended objectives of treatment are made explicit and the counselors at least conditionally accept these objectives, there is little point in doing an outcome study at all." Patterson (1966) related values to the goals of the counseling process contending that "outcomes must be evaluated in terms of their desirability" and that . . . "until we can agree upon what are the desirable outcomes, we can never compare and evaluate the effectiveness of different methods of counseling or psychotherapy."

One of the major issues in reaching agreement on counseling objectives and outcome criteria has centered around the relative merits of internal global type criteria, such as the various measures of "self," as opposed to external behaviors which can be observed and reported more objectively. Those who take a phenomological view of counseling tend to prefer naturalistic observations and internal criteria to evaluate the effectiveness of the counseling process, while those who look upon counseling more as

a learning process insist upon an experimental approach using external objectively measured criteria. There is reasonable hope that new approaches can be developed which will capitalize upon the major strengths of both types of criteria.

Normative values placed upon external behavior may provide an opportunity to develop multidimensional criteria that can serve as measures of outcomes suitable to those of the various theoretical orientations. Strupp (1962) for example has stated that "if psychotherapy is effective, the benefits must be somehow demonstrable in the person's behavior. It is unlikely that a single set of criteria will be applicable to all persons, but it may be possible to evolve a limited set of norms having wide utility." Brayfield (1963) has taken a position which does not reject subjective criteria but suggests that "society imposes an external evaluation or performance criterion that is of equal or more importance." Zax and Klein (1960) concluded that "further development of criteria for evaluating the effects of psychotherapy awaits the clarification, resolving, and communication of the values we hold" regarding normality in the sense of psychologically and socially desirable behavior. They further suggest an interesting and logical approach for the derivation of behavioral criteria based on the premise that the one common element in all "normal" personalities "is the ability to function in relation to the norms of his particular social setting." Procedurally this approach implies that broad normative studies cound be used to identify common dimensions and to develop a limited number of criterion models that might serve as the basis for structuring desired outcomes for a wide range of individuals and aggregat groups.

Fourth, the problem of developing an adequate research paradigm within the framework of existing theory has imposed serious limitations upon outcome research. Kiesler (1966) examined three prevalent theories of psychotherapy against criteria for a comprehensive research model and observed that behavior therapy was too specific and that analytical and Rogerian therapies were too general in explaining known facts about psychotherapy. He concluded that no one theory is sufficiently comprehensive to structure acceptable outcome research due to inadequacies in specifying both the dependent and independent variables, as well as methodological consideration of confounding variables within the research area. The need for new approaches that will take account of the significant domains of variables is obvious. New theoretical formulations and reformulations of existing theories will no doubt emerge from the integration of empirical findings into more comprehensive research paradigms. Brayfield (1963) has predicted that in the area of vocational psychology and counseling, "the taxonomic quest, both individual and environmental, will converge on the discovery of a common multidimensional structure with both static and dynamic properties within which the idiographic account of human life may be perceived."

Finally, methodological problems of research design, including instrumentation, controls, sampling and analysis, have received major attention in the critiques of outcome research. This writer would like to take the position that methodology is a problem only because the four major problems discussed above have not been solved. Methodological considerations are an integral part of, and cannot be treated in isolation from, the research variable structur

When the process or independent variables, the situational variables, and the criterion or dependent variables have been identified and precisely defined; and when the relationships and interactions of these variables have been built into a comprehensive research paradigm, adequate methodology will emerge as a requisite part of the total structure.

THE NATIONAL STUDY OF GUIDANCE

What has come to be identified as the National Study of Guidance was initiated eight years ago as an exploratory project by the U.S. Office of Education. The tentative research design and implementation plans for the study emerged in 1965 as a product of the deliberations of hundreds of individuals. In 1959 the Office of Education called two National conferences and seven regional conferences to plan for the evaluation of the effectiveness of guidance and counseling programs under Title V-A of NDEA. These meetings resulted in a publication (Wellman and Twiford, 1960) dealing primarily with programmatic variables but concluding that the only truly meaningful evaluation must be in terms of behavioral outcomes. The Cooperative Research Branch of the Office of Education conducted research seminars in the area of guidance and counseling at the University of Georgia in 1961 and at the University of Michigan in 1962. These seminar groups reviewed the status, needs, and problems of research in the field and the Michigan group suggested a research model. This model specified four major domains of variables that must be included to insure controls, adequate analysis of variable interactions, and meaningful conclusions. These variable domains were (1) guidance and counseling or process variables, (2) student variables capable

of differentiating clients, (3) situational variables to describe the social, cultural, and institutional setting in which the process is carried out and in which the student functions, and (4) criterion variables based upon the stated objectives of the program or process.

In 1963 the USOE developed a tentative research proposal based primarily upon the recommendations of the above mentioned groups. This proposal was then critiqued by a total of 134 researchers and practicioners who met in 29 small group meetings in eighteen different states during 1963-64. A revised proposal and a summary of the suggestions from the critique groups was submitted to a panel of six experts in June, 1965 for recommended action. This group encouraged the USOE to continue the project and to take immediate steps to develop a more comprehensive design for the research. Pursuant to these recommendations one contract was awarded to Meidt to develop the research design and another to Proff to prepare abstracts of related studies. The reports of these projects were completed in October, 1965 (Meidt, 1965; Proff, 1965).

The overall purpose of the project, as reported by Meidt, "is to identify factors of guidance process that are uniquely related to changes in the behavior of students." The determination of these relationships would serve to identify relevant sources of variance associated with student behavioral change and thus provide an empirical basis for the formulation of hypotheses that could be tested experimentally to establish cause and effect. The plan includes the collection and analysis of sufficient data on a longitudinal basis to fulfill the overall purpose, and concurrently to initiate a series of experimental studies which would examine smaller segments of the model in depth. Approximately five years would be required to com-

plete this aspect of the study. Hopefully the results would generate hypotheses for a coordinated experimental examination of the observed relationships during the years following the initial study.

The Neidt design suggested that the initial study be planned in four phases (1) the development of taxonomies and operational definitions of variables to be included in each of the four variable domains, i.e., process, criterion, student and situational, (2) instrumentation and field testing of instruments, (3) sample selection, and (4) data collection and analysis.

The University of Missouri was awarded a contract in 1966 to carry out phase I of the project. The balance of this discussion is devoted to consideration of some of the preliminary formulations for the development of a taxonomy of guidance objectives from which the criterion variables can be derived and defined. It should be noted that this project is designed for secondary school students and the process variables will include not only counseling but other guidance activities as well. However, it would seem that some of the work may be adaptable to other age groups and the more limited processes of counseling or psychotherapy.

THE CONCEPTUAL FRAMEWORK

The conceptual framework developed here is an attempt to provide a systematic means for (1) the derivation of guidance objectives at the secondary school level,* and (2) the identification of behavioral criteria that may be useful in estimating the degree to which speci-

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* This discussion is limited to the secondary school age group and guidance is interpreted as a total complex of activities centering in counseling but including other functions consistent with specified guidance objectives.

fied objectives have been achieved. The concept of individual development, through maturation, learning, and adjustment within specified environmental dimensions is fundamental to the approach proposed. Individual development is thus interpreted from the dynamics of reaction to and interaction with an environment which provides resources for development, imposes restrictions upon free movement, and presents models of expectancy. The ultimate global criteria might be structured in terms of the effectiveness of individual functioning, where effectiveness is determined by individual satisfaction and normative tolerances of the culture. The individual's attitudes, values, and judgments, with respect to himself and his behavior are of prime importance; but are adequate criteria of effective functioning only when viewed in terms of consistency with dominant cultural norms in specific situations.

The general guidance objective in secondary schools, for purpose of this formulation, is to facilitate the development of each individual so that he will become increasingly able to understand, to predict, and to control his behavior in a manner consistent with his personal and environmental resources and limits. This objective may be translated within the reduced scope of functions usually relegated to guidance in educational settings by specifying that the purposes of guidance activities are to assist the individual (1) to make essential decisions and to take action relevant to sequential progress in personal development; and (2) to cope with problems which are deterrents to sequential progress in personal development. These objectives can be given practical interpretation, with promise for researching guidance outcomes, to the extent that the concept of personal development can be defined within the practical boundaries

of the guidance function in an educational setting. The following basic propositions represent a preliminary attempt to build a structure of personal development with practical limits, and to provide a frame of reference for the research of guidance outcomes.

BASIC PROPOSITIONS

PROPOSITION I. Personal development is a process of continuous, but not necessarily uninterrupted, or uniform, change in a pattern of sequential progress toward increasing effectiveness in the management and mastery of the environment for the satisfaction of immediate and probable future individual needs. Effective behavior is the result of selecting and adopting responses which meet the need criteria, and rejecting those responses which do not as experienced and interpreted by the self. The individual progresses toward effective functioning as he learns to respond in a manner satisfying to him and in a manner satisfactory in the socio-cultural context. Thus an increasing tendency to respond in a given manner to specific stimuli or situations develops, directional tendencies are formed, and finally commitment to a particular mode of behavior emerges. This developmental process is at the very core of the guidance function in education suggesting a structure for the formulation of specific objectives and operational definitions for outcome criteria. Additionally, since development is viewed as a process within an individually variable time dimension, research of developmental outcomes dictates a longitudinal design.

PROPOSITION II. The individual tends to value that behavior which is rewarded by his sub-culture. Cultural norms then influence the importance placed upon particular behaviors by individuals who

identify with the cultural group. The developmental process broadens experience for the individual and, as a variety of experiences are assigned relative values, a value system emerges as a basis for placing normative values on each new experience. Breadth of experience, the individual's interpretations of values assigned by groups, and perceived identity with groups, may be important variables in the status of values and the development of values. The variability in educational, vocational and social outcomes of guidance is hypothetically related to the variability in the educational, vocational, and social values dominant in the sub-culture with which the individual identifies.

PROPOSITION III. The degree and level of development at any given time influences accuracy of perceptions, level of conceptualization, and subsequent developmental rate and direction. This interrelationship of these variables suggests that knowledge of developmental status and dynamics is a prerequisite to planned behavioral change. At the secondary school level no student is at a zero point in development, hence change must be measured from some relative point rather than an absolute. One research step in measuring developmental change is the estimate of status and the differentiation of one student or group of students from others. It would seem equally important that those charged with the responsibility of assisting students with the modification of their behavior, should be aware of the students' readiness, ability, and freedom to choose and to act in the change process. The relationship of one act or change to the probability of subsequent direction and change is fundamental to the developmental concept.

PROPOSITION IV. All positive developmental changes are potential steps toward the achievement of purposeful goals. In this sense the kind of behavioral outcomes that might be associated with the secondary school guidance function may be viewed as means to the development of other behavior modes rather than as end results. This approach interprets client change within the guidance process as legitimate outcome, thus providing a more integrated structure for the classification of objectives and outcomes in a developmental process hierarchy where sequential outcomes may be observed and investigated as movement toward or away from expected outcomes. It may then be hypothesized that behavior change which follows an orderly and systematic course will provide evidence for the prediction of particular directional tendencies and behavior patterns.

PROPOSITION V. Environmental or situational variables provide the external dimension for the interpretation of behavioral antecedents and the estimation of mediating influences on future development. Developmental resources, behavior limits, and goal expectancies emerge from the physical, social, and value structure of the culture with which the individual identifies. Knowledge, understandings, skills, attitudes, values, and aspirations are developed from the interaction of these external variables with the internal variables which characterize the individual. Furthermore the internal variables are never fully interpretable to the exclusion of the external framework. Therefore, guidance objectives and outcomes become meaningful only when related to the external world as the individual perceives it and as members of his cultural group perceive it. The identification and definition of these external variables should be a goal of outcome research design so that more rigorous controls may be

imposed in the investigation and more precise conditions assigned to the results. The achievement of this goal will enable more accurate differentiation of students and in turn a more relevant interpretation of the outcomes of varying guidance practices with reference to such student differentiation.

PROPOSITION VI. Developmental models of sequential progress toward effective functioning can be developed for the environmental points of reference closely associated with the guidance function in education, i.e., educational development, vocational development, and social development. Current theories, and evidence already accumulated, with respect to sequential development, (including crucial points for decision and action, developmental stages, developmental tasks, and normative expectancies), represent points of departure for the structuring of tentative models. The study of large aggregates of individuals, at various developmental levels, over the essential developmental period would be necessary to revise and refine the tentative models. Thus a criterion model would always be subject to modification in the light of new evidence relevant to aggregate populations demographically similar to those for which the model was structured. The Arden House Research Seminar group (Cohn, 1964, pp. 29-31) suggested that the establishment of criterion models, including estimated probabilities and conditional probabilities of the occurance of significant sequential events (decisions, action, change, etc.), would provide a basis for determining the relative effectiveness of various guidance processes in terms of goodness of fit or deviation from the criterion (predicted) model. Recently reported longnitudinal studies of career development and of vocational interest development lend some support for the research promise

of the model approach. (Cooley, 1964; Super and Overstreet, 1960; Tyler, 1964).

PROPOSITION VII. The usefulness of criterion models for structuring outcome research is dependent upon the extent that (1) the breadth and depth of content scaled in the model are sufficient to enable the selection of objectives, and corresponding outcomes, appropriate to the developmental status and needs of individuals; and (2) the model is sufficiently global to be valid for large aggregates of individuals. This proposition recognizes the uniqueness of individuals in the guidance process, and at the same time acknowledges the commonality of developmental and behavioral elements among individuals as a basis for research. The case for this position has been developed in numerous discussions of the use of clinical and statistical data for the prediction of human behavior, and one extreme is summarized well by Hunt and Jones in their statement that,

> There is sufficient commonality in the behavior of any one patient over time, in the behavior of groups of patients at a given time, in the behavior of any clinician over time, or in groups of clinicians at a given time to make it possible to gather the repetitive data and establish the probability inferences required to make useful and valid predictions (Hunt and Jones, 1962).

The relationship between the time dimension and the sample size in this statement is significant only with respect to the number of observations needed to establish the commonality of elements. The extreme idiographic position denies the validity of investigations to establish generalized relationships between the guidance process and behavioral outcomes. The approach taken here accepts the modification of behavior as the primary purpose of guidance and proposes

that general principles applicable to the dependent variables must be derived empirically.

PROPOSITION VIII. Criteria for the estimation of outcome variables should meet the following conditions to maintain consistency with the conceptual orientation of the foregoing propositions and of the developmental and environmental dimensions in this framework:

1. Criteria should be expressed positively and defined in terms of evidence of the achievement of, or movement toward, specific developmental objectives. (This suggestion is made in the face of the difficulty that the Minnesota group (Volsky, et.al., 1965, p. 174) and others have had in the measurement of "asset-oriented" criteria, but operational definitions of positive movement should in no sense reject "problem-reduction' criteria. It would however, propose that criteria can be formulated to express the longer range results of the reduction or elimination of negative behavior.).
2. Basic criteria should be reduced to units of behavior that will permit reliable observation and reporting, and if global criteria are utilized and interpreted by inference, relationship with behavioral manifestations should be demonstrated as a basis for the inference.
3. Criteria should be defined precisely enough to permit scaling on a continuum, with the extremes of the variables easily identifiable; and where discrete units are utilized relationships to continuously distributed units should be investigated. (Farnsworth, 1966)
4. The developmental approach, which attempts to differentiate

individuals and to account for environmental influences, dictates the establishment of multidimensional criteria. (The interrelationships of variables would suggest that any single criterion would be either meaningless in isolation, or too global to satisfy the other conditions of good criteria.)

5. Criteria should be structured to permit the estimation of criterion variables from two or more sources wherever possible. (Observations by the student, the counselor, and significant others would appear to be the primary informational sources in such variable estimations) (Farnsworth, 1966).
6. Criteria capable of reflecting change in relation to a developmental model should permit repeated observations with appropriate attention to the time dimension.
7. Criteria requiring subjective estimations should be balanced with objective data at least inferentially related to the subjective criteria.
8. Combinations of internal criteria, e.g., intraindividual or intracounseling, with external performance criteria should be sought. (This condition may be considered as a corollary to conditions 4, 5 and 7 above.)
9. Operational definitions of criteria should provide the basis for instrumentation rather than the instrument providing the definition of criteria. (Existing instruments may be satisfactory to measure the criteria selected but caution should be exercised in permitting the instrument to dictate the criteria.)

THE SELF-ENVIRONMENT DIMENSIONS

The conceptual framework proposed for the research of guidance outcomes is a highly complex two dimensional schema which takes cognizance of the dynamics of individual development and the interaction among developmental variables and selected environmental variables. The concept of behavior development is viewed as the sequential process by which the individual moves from the most elemental point of awareness to the point of integrative behavior with respect to specified environmental reference points and identified reference groups. The development of this concept requires the classification and definition of the major elements in these two basic dimensions, i.e., developmental sequence, and environmental reference points and groups.

The basic propositions discussed above provide the foundation and serve as underlying assumptions, for the conceptual development. Internal consistency, as difficult as it is at times, has been and will continue to be a goal in this formulation. The efforts to draw from learning theory, perceptual psychology, and psycho-social theories have been relatively productive, but have required the formulation of hypothetical transitions that remain to be tested. This is particularly true in the general inference of the orderly course of development, in which each change is hypothetically related to subsequent change within a specified environmental field. Additionally, the cognitive process is emphasized but hopefully not at the expense of the affective and conative forces which influence this process and the interpretation of outcomes as experienced by individuals.

The format and some of the content of the proposed framework were influenced greatly by the attempts of a few writers to come to grips with the structure of behavior and the relation of guidance and education to that structure. The explanations of Callis (1960) regarding the sequential process involved in the development of the behavior repertoire, and the classification of client problems in diagnostic categories, were most helpful in framing the initial structure. The concept of feedback in the process of evaluation and reality testing of new experience was strengthened by the TOTE unit analysis suggested by Miller, et.al. (1960) and by the behavior construct developed by Weitz (1964, pp. 1-61). Mathewson's (1955, pp. 132-141; 1963, pp. 4-11) self-situational theory, though somewhat more global, proved most helpful in the initial development of the two dimensional concept. Jahoda's (1958) discussion of mental health concepts, and Tiedeman and Field's (1965) concept of purposeful action reinforced the desirability of studying positive aspects of behavior, as well as the feasibility of attempting to develop criteria of effective individual functioning within the socio-cultural context. Finally, the work of Krumboltz (1966) has been very suggestive in the examination of conditions for the derivation of researchable criteria.

The Callis theory emphasized the basic individual need structure as the energizer of behavior. This concept is fundamental and needs are accepted here as central and key forces in stimulating action and subsequent behavior modification or development. The development of an individual's behavior repertoire was viewed by Callis as a process starting with the perception of experience and leading to generalizations of successively higher order. Perception was seen

as interpretations of and reactions to new experience as conditioned by past experiences. The modification of subsequent behavior in similar situations resulted from the generalizing effect of the perception and as this new behavioral response was utilized in more varied and complex situations second and third order generalizations occurred and the behavior repertoire was developed and expanded from the application of this process to innumerable experiences. Thus the behavior repertoire became the dynamic constellation of responses which the individual had at his disposal in adjusting to and solving problems in life situations. For a single experience this process can be diagrammed as follows:

Experience→ Perception→ $Generalization_1$→ $Generalization_2$→ etc.

This oversimplification of the Callis schema omits one important point which was implicit in his formulation. A single experience could rarely, if ever, be traced to the development of a specific generalization. Generalization results from the interactions of many input experiences and are subject to modification with each new input. Unless this latter concept can be accepted there is little reason to think of education or counseling as modifiers of behavior.

Expansion of the Callis theory was necessary to make this structure useful in formulating a developmental sequence as a basis for the derivation of guidance objectives and outcome criteria. Revisions to provide greater definition and hopefully to come a bit closer to a developmental sequence that can be described from behavioral observations, include two major additions and some revision of definitions.

First, the TOTE (Test-Operate-Test-Exit) concept of Miller, et. al. (1960) suggested the consideration of a cybernetic process where

a reservoir of established responses, or the behavior repertoire, and the internal resources of self provide a basis for the choice evaluation and reality testing of alternative responses to input experience The magnitude and quality of this continuous feedback then becomes an integral part of the developmental process.

Secondly, it seemed that the jump from perception to generalization did not adequately account for differentiation, the determination of relationships, the development of meanings, and the formation of concepts that are hypothesized to precede definitive choices, purposeful action, and enduring behavior at the generalization level. Differentiation followed by a conceptualization process is being suggested as a logical bridge for this gap. As development of the schema has proceeded the work of the school counselor seems to relate very well to the seemingly obvious steps in the conceptualization process.

With these revisions the sequence of behavior development may be diagrammed as shown in Figure 1. The process is interpreted as a cognitive learning sequence tempered by the affective qualities which are brought to the experience situation and which develop from the process. It further suggests sequential progress, without regard for the time dimension, toward behavioral consistency and by internal evaluation, behavioral effectiveness. Experience becomes related to these ultimate behavioral outcomes only as the sequential steps are achieved but it should be noted that all of the steps are interrelated and interdependent. That is, the nature of the perceptual outcomes influences conceptualization which in turn influences generalization.

The interaction among the process elements is only one part of

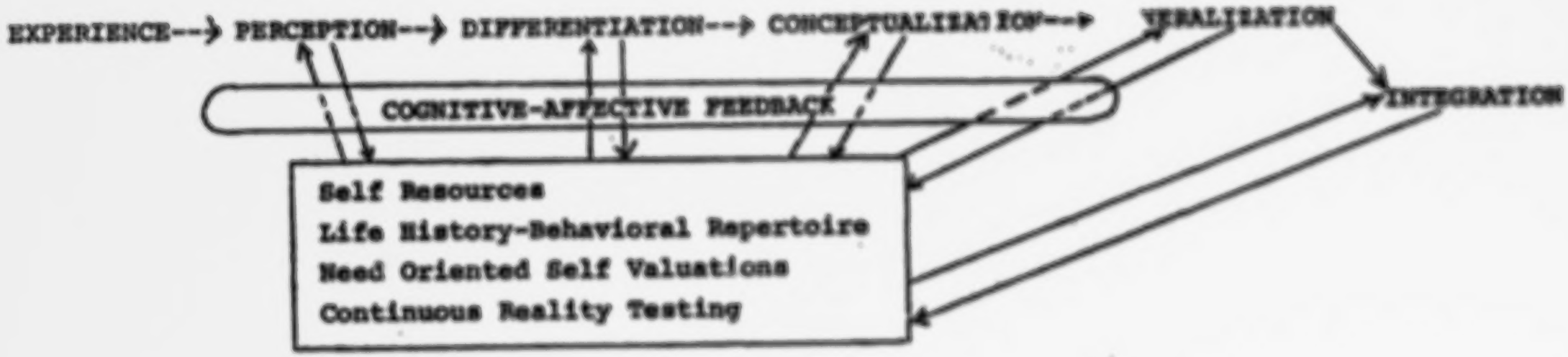

Figure 1. Sequence of Behavior Development*

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* The basic elements of the process are defined as follows for purposes of this discussion: (Some of these definitions are somewhat more restrictive than generally used in experimental psychology)

Experience. Any external event or events which stimulates the individual to act.

Perception. An awareness of event(s) or object(s) which leads to external differentiation and interpretation of events or objects perceived but does not include internalized interpretations associated with personal meanings.

Differentiation. An awareness of concrete or symbolic differences between events or objects which enable the individual to make interpretations and classifications with due regard for the distinguishing characteristics of such events or objects.

Conceptualization. The recognition and interpretation of relationships, particularly in relating self to differentiated aspects of the environment which in turn gives personal meaning to experience and leads to the assignment of values and a tendency to act in accordance with these interpretations and values, thus the internalization of behavior.

Generalization. The adaptation of a particular mode of behavior to a variety of situations and to new situations, thus the development of an integrative behavior pattern which enables the individual to respond with effectiveness and consistency.

the dynamics which influence the final outcome. The cybernetic notion of continuous evaluation, based on self resources, life history, self valuations and current reality testing, and the feedback into the process may alter the direction and magnitude of the behavioral change at any point in the sequence. That is to say that at the point of initial perception, or awareness, feedback of existing knowledge, values and modes of behavior affect the nature and accuracy of differentiations. The criteria for reality testing rests in what the individual has brought to the experience situation. Thus as self is related to the situation the conceptualization process is shaped in a large degree by interpretations based on the knowledge values, feelings, and behavior responses which have passed the individual's test of reality and with which he is most comfortable. It is only as the individual is able to conceptualize and thoroughly evaluate new knowledge and modes of behavior, that positive development takes place and behavioral modification becomes integrated into the generalized behavioral pattern. The feedback process enables the individual to predict the consequences of response, and through such prediction to select those stimuli to which response will be made, to determine the nature of the response, and in the final analysis to have some degree of control over his behavior.

The other major dimension of this framework is based upon the hypothesis that behavior cannot be interpreted or changed within the confines of the individual organism but must be viewed against the backdrop of environment in the broadest sense. If this position is tenable then the proposed developmental sequence can be structured and interpreted only in terms of environmental factors which influenc

behavior change and determine criteria for the evaluation of the effectiveness of human functioning. Simply stated the individual's environmental field provides opportunity and resources for development, but at the same time makes certain demands, imposes limits, and sets patterns of behavioral expectancy.

The proposed classification of guidance objectives within environmental categories is derived from four sources. First, current theories of vocational development and of role development suggest that meaningful environmental differentiations can be made. Second, rather extensive studies of types and causes of client problems and the development of diagnostic categories in both college and high school settings support the validity of differentiating environmental variables in terms of task oriented areas and social groups. Third, a survey revealed that most of more than 200 secondary school guidance objectives proposed in the literature could be classified in the environmental categories. Fourth, the most fruitful investigations of the perceptual and conceptualization processes would seem to be within the context of environmental reference points and reference groups.

The environmental dimension has been structured to be consistent with the areas of development and adjustment of primary concern to the secondary school guidance function, and of major significance to the secondary school age group. The environmental reference points are designated as educational, vocational, and social. These areas of development are virtually universal among secondary school student and appear to be promising for the formulation of criterion models based upon developmental objectives and normative type expectancies

or outcomes. The reference groups designated as family, peers, and significant others, are identified as a means of differentiating the major groups involved in the interpersonal relationships of secondary school students. The hypothetical criterion models may emphasize adjustment more in the case of the reference groups and development more in the case of the reference points. However, at the present time it seems feasible to attempt to develop objectives and criteria with both emphases.

The interaction between reference groups and reference points in the sequence of behavior change opens up interesting speculation regarding the desirability of considering reference groups as a third dimension of the reference point developmental processes. This idea will be explored in such areas as the relation of family and peer expectations and values upon the course of educational, vocational and social development.

TWO DIMENSIONAL DERIVATION OF GUIDANCE OBJECTIVES

The basic hypothesis of this proposal is that objectives and outcome criteria, relevant to the guidance process variables, can be expressed in terms of sequential progress toward more global goals with respect to the individual's environmental relationships, and intrapersonal development. That is, to specify behavior change which guidance might reasonably expect to influence in the developmental sequence and to identify specific kinds of evidence indicative of such change.

The sequence of behavior development represents three major levels of behavior which can be translated into a hierarchy of corresponding levels of guidance objectives, i.e., the perceptual level,

the conceptualization level, and the generalization level. When the three levels of objectives are diagrammed on one axis and the reference points and groups on the other an eighteen cell chart is produced representing the possible number of major criterion models that the schema might accomodate (See Figure 2). Whether eighteen sets of objectives and criterion models can be developed which are sufficiently discrete to use for research purposes must be determined from experience.

The three levels of objectives are defined as follows with illustrations of possible objectives and outcomes for the vocational reference point:

LEVEL I. Perceptual Objectives. These objectives include the acquisition of information and knowledge, the development of skills, and the clarification of attitudes and values so that the individual becomes more aware of, and is able to differentiate more accurately, those aspects of his environment related to developmental choices and adjustment, as well as his own personal attributes. For example, occupational groups can be differentiated on the basis of the type and level of training required for entry. A perceptual level objective for the student might then be to differentiate occupational groups in this manner and the criterion measure would attempt to determine the accuracy of such differentiation following the application of process. It should be noted that the objective relates to student output rather than process which in this case might be to provide and interpret information relevant to occupational training requirements. Objectives at this level will tend to be expressed as more immediate types of outcomes and will be act-oriented to a greater extent than those at the higher levels.

Figure 2. BASIC DIMENSIONS OF GUIDANCE OBJECTIVES AND OUTCOMES

Environmental Dimensions / Developmental Dimensions	REFERENCE POINTS			REFERENCE GROUPS		
	Educational	Vocational	Social	Family	Peers	Significant Others
LEVEL I. 1. Perceptual a. Awareness b. Differentiation 2. Role Identity						
LEVEL II. 1. Conceptual a. Relationships-meanings b. Concept formation 2. Role Concepts a. Acceptance b. Evaluations-Adequacy c. Normative values 3. First Order Integration						
LEVEL III. 1. Generalization a. Action-pursuit of purpose b. Accomodation c. Satisfaction d. Mastery 2. Role Performance a. Adjustments-Normative Tolerances b. Commitment to purpose c. Value Formation 3. Integration						

LEVEL II. Conceptual Objectives. Objectives at this level reflect the formation of concepts by relating perceptions of self to specified environmental perceptions. These objectives infer the personal meanings that the individual places upon perceptual relationships. The concept of the various environmental roles and their relationship to normative values is inherent to these objectives. Outcomes at this level should relate to the accuracy, consistency and reality of choice behavior and role performance. For example, a conceptual objective would be to make a tentative vocational choice consistent with the individual's predicted potential for completing needed training. The criterion measure could include self and counselor evaluation of a tentative choice. The conceptual objectives include both immediate outcomes and connations for future outcomes, hence the outcomes of reality testing in the form of valuing and corresponding increase in behavioral tendencies become more significant.

LEVEL III. Generalization Objectives. Generalization objectives reflect purposeful action, adjustments within normative tolerances, and consistent and enduring modes of behavior. Objectives classified at this level include the more global performance outcomes, such as the accomodation, satisfaction, and mastery criteria suggested by Tiedeman (1963) and the long range outcomes investigated by Campbell (1965). The systematic and consistent application of a value hierarchy in both internally expressed evaluations and external manifestations, as well as commitment to purpose, would typify generalization objectives related to value formation. Within the vocational development area one generalization level objective might be to obtain and sustain employment in a position which affords continuing personal

satisfaction and where the individual can consistently meet the employer's performance standards. Two criterion measures of the achievement of this objective might be production output and expressed satisfaction. At this level a combination of act-oriented and global objectives and criteria will probably be more manageable than at the two lower levels where behavior development is more fluid and perhaps less integrative.

This conceptual framework hopefully will serve as a structure for the development of meaningful outcome criteria. It will no doubt be modified as criterion models are developed and field tested. To the extent that it may help in more clearly defining guidance objectives and desired outcomes, it will contribute one small part to a more comprehensive theoretical construct and a more adequate research paradigm, both of which must emerge before effective and meaningful outcome research can be expected.

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